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# Water Pollution and Flood Reduction Study: Kick-off Meeting



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October 11, 2022

# Agenda



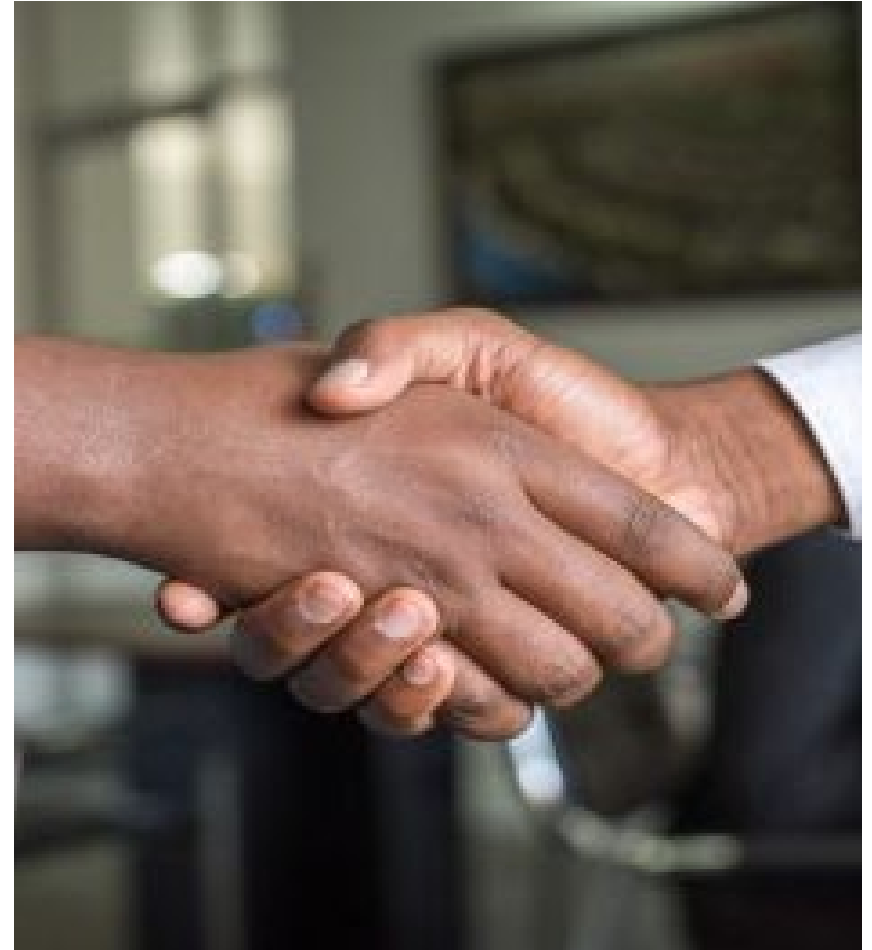
- ✓ Introductions
- ✓ Setting the Stage
- ✓ Roles and Commitment of Committee Members
- ✓ Scope of Work Review
- ✓ Life After the Feasibility Study
- ✓ Lessons Learned
- ✓ Round Table Discussion
- ✓ Next Steps



# Introductions



- Name
- Department/Role





# Settling the Stage – Why are we here?



## SETTLEMENT AGREEMENT BY AND BETWEEN CONSERVATION LAW FOUNDATION AND CITIES OF DOVER, ROCHESTER, AND PORTSMOUTH

The Cities of Dover, Rochester, and Portsmouth (collectively “the Municipalities”) and the Conservation Law Foundation, Inc. (“CLF”), for good and valuable consideration mutually exchanged and acknowledged, hereby enter into this Settlement Agreement (“Agreement”) by and between as follows:

**WHEREAS**, in January 2020, the United States Environmental Protection Agency (Region 1) (“EPA”) issued the “Draft National Pollutant Discharge Elimination System (NPDES) Great Bay Total Nitrogen General Permit for Wastewater Treatment Facilities in New Hampshire” (NPDES Permit No. NHG58A000) (hereinafter “Draft General Permit”);

**WHEREAS**, the Municipalities, CLF, and other interested parties submitted extensive written comments on the Draft General Permit;

**WHEREAS**, on November 24, 2020, EPA issued the final Great Bay Total Nitrogen General Permit (NPDES Permit No. NHG58A000) (the “General Permit”) along with EPA’s Fact Sheet and Response to Public Comments, each available at <https://www.epa.gov/npdes-permits/great-bay-total-nitrogen-general-permit>;

**WHEREAS**, Part 2 of the General Permit contains final effluent limitations and monitoring requirements for each Permittee’s wastewater treatment facility (“WWTF”) similar to those in the draft permit, although with more recent (updated) flow data and, in keeping with scientific knowledge and past EPA permitting practice, a total nitrogen load limit based on the growing season of eelgrass;

**WHEREAS**, Part 3 of the General Permit provides for the voluntary submission of a proposal, within 180 days of the effective date of the permit, outlining: (1) an approach to ambient water quality monitoring to determine progress and trends; (2) a method of tracking total nitrogen reductions and additions over the course of the permit; (3) an outline plan for overall source reductions of total nitrogen over the course of the permit; (4) an inclusive and transparent process for comprehensively evaluating significant scientific and methodological issues relating to the permit, including the assumption of a load-based threshold of  $100 \text{ kg ha}^{-1} \text{ yr}^{-1}$  versus any other proposed threshold that might be used for future permitting or planning purposes, including

the General Permit and become

ying the General Permit state could lead EPA to reissue an o, or to abandon that approach in

8. Funding Sustainability: Recognizing that sustainable funding is imperative for ongoing water quality efforts, the Municipalities shall consider the adoption (by local ordinance or act) of a stormwater utility by December of 2023. The Stakeholder Committee may provide input or information to the Municipalities by way of either submitting written comments or providing verbal comments, if permitted, during any public speaking forum held by any public body of the Municipalities, and shall be provided notice of such comment opportunities.

# Settling the Stage – Why manage stormwater?



## NH MS4 General Permit

United States Environmental Protection Agency (EPA)  
National Pollutant Discharge Elimination System (NPDES)

### GENERAL PERMITS FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS IN NEW HAMPSHIRE (as modified)

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 U.S.C. §1251 *et seq.*), any operator of a small municipal separate storm sewer system whose system

- Is located in the areas described in Part 1.1;
- Is eligible for coverage under Part 1.2 and Part 1.9; and
- Submits a complete and accurate Notice of Intent in accordance with Part 1.7 of this permit and receives written authorization from EPA

erein.



## NEWS

### EPA's stormwater standards draw criticism

*MS4 permits called burdensome, costly*

**Nik Beimler** [nbeimler@seacoastonline.com](mailto:nbeimler@seacoastonline.com)

Published 3:15 a.m. ET April 2, 2017 | Updated 4:23 p.m. ET April 1, 2017



## Politics & Government

### EPA To Improve Stormwater Management Across New Hampshire

The U.S. Environmental Protection Agency (EPA) said yesterday it would be focusing on improved stormwater management across New Hampshire.

**Dana Forsythe**, Patch Staff

Posted Fri, May 11, 2018 at 10:47 am ET | Updated Mon, Jun 11, 2018 at 11:48 am ET



# Regulatory Requirements



## NPDES MS4 Requirements:

- Catchment investigation of all 165 outfalls to identify sources of dry weather flows
- Removal of dry weather flows when identified
- Mapping assets
- Collect wet weather samples at all 165 outfalls
- Inspection and maintenance of 70 City owned stormwater treatment BMPs. First inspected in 2021 (70% of the BMPs require maintenance)
- Installation of stormwater treatment BMPs on City owned properties



# Regulatory Requirements



## Great Bay Total Nitrogen General Permit – Adaptive Management Plan

- Monitor Ambient Water Quality in the Great Bay
- Tracking reductions and additional of total nitrogen within the City
- Source Reduction Plans which include already planned stormwater structural BMPs, non-structural BMPs, and future retrofit of municipal properties





# City's Stormwater Assets



- ❑ 5,000 catch basins
- ❑ 860 drain manholes
- ❑ 165 outfalls
- ❑ 35 Culverts
- ❑ 800,000 linear feet of drainpipes and culverts (6" - 84" diameter)
- ❑ 70 City-owned and maintained stormwater BMPs





# ◆ How Does the City Pay for it?



# Stormwater Fees



Over 2,000 stormwater fees  
in the United States



Figure 1. U.S. stormwater utilities (SWUs).

34 in New England

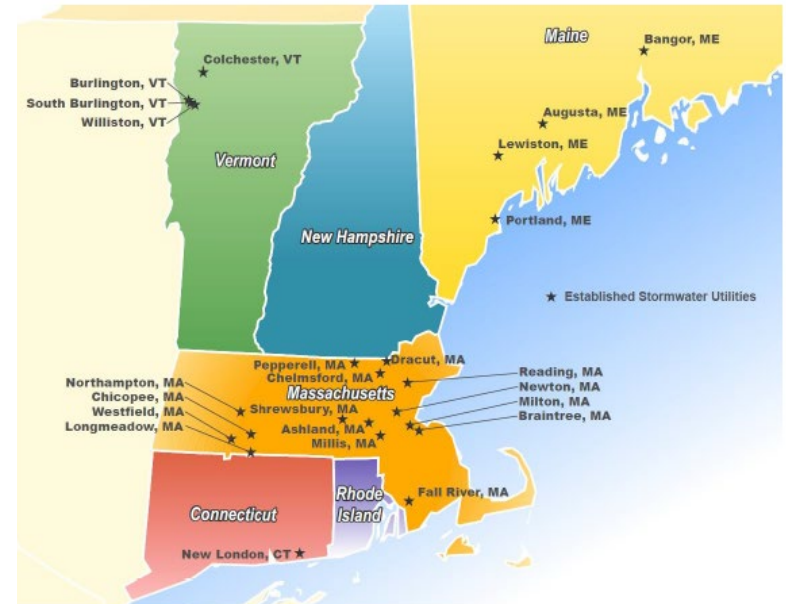


Figure 1-3 Stormwater Utilities in New England as of June 2019



# Case Study – South Burlington, VT



- Population 20,000
- Fee established in 2005
- Billed as a quarterly fee
- Annually:
  - \$86.40 single-family home
  - \$43.20 for duplexes
  - \$28.60 for triplexes
  - All other properties based on ERU
- Credit program available to reduce fee by 50%



# Case Study – Chelmsford, MA



- Population 34,000
- Fee established in 2017
- Annually Flat Fee:
  - \$60 single-family home
  - Tiered flat fee for other properties based on area of impervious cover
- Credit program available to reduce fee by 20%

STORMWATER ENTERPRISE RATE STRUCTURE	
EFFECTIVE 7.1.21	
Parcel Type	Rate
Residential	
• Single Family	\$60
Other Residential/Non-Residential	
• Tier 1 (IA < 5,000 SF)	\$325
Other Residential/Non-Residential	
• Tier 2 (5,000 ≤ IA < to 10,000 SF)	\$650
Other Residential/Non-Residential	
• Tier 3 (10,000 ≤ IA < to 15,000 SF)	\$1,000
Other Residential/Non-Residential	
• Tier 4 (15,000 ≤ IA < to 25,000 SF)	\$1,500
Other Residential/Non-Residential	
Tier 5 (25,000 ≤ IA < to 50,000 SF)	\$2,000
Other Residential/Non-Residential	
Tier 6 (50,000 ≤ IA < to 75,000 SF)	\$2,750
Other Residential/Non-Residential	
Tier 7 (75,000 ≤ IA < to 100,000 SF)	\$3,500
Other Residential/Non-Residential	
Tier 8 (100,000 ≤ IA < to 200,000 SF)	\$4,500
Other Residential/Non-Residential	
Tier 9 (200,000 ≤ IA < to 300,000 SF)	\$5,500
Other Residential/Non-Residential	
Tier 10 (300,000 ≤ IA < to 400,000 SF)	\$6,250
Other Residential/Non-Residential	
Tier 11 (400,000 ≤ IA < to 500,000 SF)	\$7,250



# Case Study – Lewiston, ME



- Population 37,100
- Fee established in 2017
- Fee Structure
  - \$60 single-family home
  - \$90 duplex
  - Other properties:
    - \$60 flat fee for first 2,900 square foot of impervious area and \$0.0616 for every square foot of additional impervious area
- Credit program available to reduce fee by 50%



# Case Study – Dover, NH



- Population 32,700
- Feasibility Study in 2020-2022
- Proposed Fee
  - \$9.39/month/ERU
  - Approximately \$112.68/year for a single-family home
- Credit program will be offered

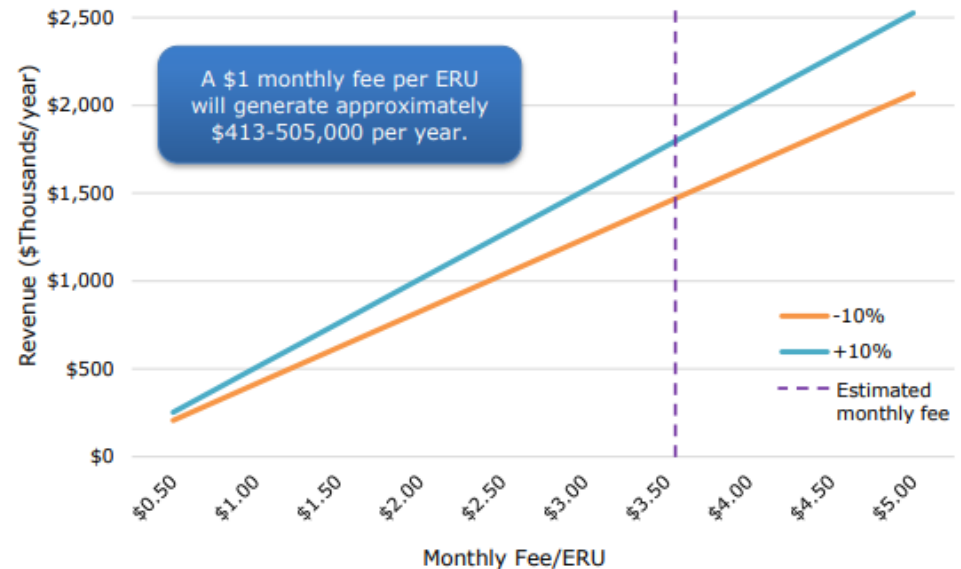




# Case Study – Concord, NH



- Population 44,000
- Feasibility Study in 2020
- Desired Annual Fee
  - \$42.52 for single family home
  - \$42.52 per ERU
- Credit program may be developed if approved



**Figure 5-2** Estimated Revenue Range Example

# Stormwater Fee - Benefits



- **Equity**
  - Typically, residential properties pay most property tax fees; whereas these properties typically generate far less stormwater runoff than commercial, industrial, institutional properties
  - All properties buy into the fee (including tax-exempt) properties
- Fees are flexible and can adapt to changing program and funding needs
- Relieves the need to use fees from the General Fund
- Transparency
- Accountability

# Roles & Commitment of Study Members



- Transfer of Information
  - MS Teams Page
- Providing background information
- Number of meetings
  - Up to 6 progress meetings (monthly)
  - Up to 2 City Council, Board, or Commission meetings
  - All meets are proposed to be in-person at City offices up to 2 hours long
  - Meeting minutes with action items
- Providing feedback on deliverables
- Constructive
- Open-minded



# Scope of Work Review



## Task 1. City Program Overview

- Review past expenditures related to stormwater and drainage infrastructure
- Prepare estimates of future expenditures related to stormwater and drainage infrastructure

## Task 2. Program Funding Alternatives

- Evaluate funding alternatives and rate structures
- Advantages and disadvantages

## Task 3. Desired Funding Level

- Establish different funding levels (low, medium, high)
- Calculate the potential fee/rate associated with each funding level

## Task 4. Feasibility Report

- Summary report of background, methodology, calculations, recommendations
- Present to the City Council for approval to most to next phase

# Schedule



Task	2022			2023		
	Oct	Nov	Dec	Jan	Feb	Mar
1. City Program Review						
2. Program Funding Alternatives						
3. Desired Funding Level						
4. Feasibility Study						
5. PM and Meetings	*	*	*	*	*	*

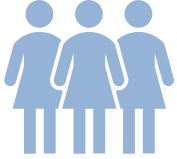
## Life After This Phase



- Gain City Council support
- Develop specific details for the program
- Public outreach
- Refine financial analysis and rate structure
- Establish a billing and database management system
- Adopt ordinance
- Implement



# Lessons Learned



Involve the public from the beginning



Ensure political understanding and support



Provide real numbers and full disclosure to public and local government



Identify and communicate need



Consider timing

# Round Table Discussion

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# Next Steps



- **Information Needed**
  - City's expenditures
    - Salaries (technical staff and labor)
    - Equipment for maintenance of stormwater infrastructure
    - Materials
    - Consultant fees
    - Future expenditures for current MS4 permit, Great Bay Total Nitrogen General Permit, CIPs, etc.
- **Deliverable**
  - City program project and expenditure spreadsheet



# QUESTIONS

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